



# Suggested Units by Grade for Next Generation Science Standards (NGSS) CSTA K-12 Computer Science Standards



K	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Sun Hats	K-PS3-1,2 K-2-ETS1-1,2,3	EiE® for Kindergarten Here's the Scoop: Designing Trash Collectors	112.2.b.6 112.2.b.8 112.2.b.12.B
	YES Enrichment™ Engineering Bubble Wands	K-PS2-2 2-PS1-2 K-2-ETS1-1,2,3		
Computer Science	EiE® for Kindergarten Sort It Out: Programming Robots to Recycle	Data & Analysis, Algorithms & Programming*		

1 <sup>st</sup> Grade	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Nightlights	1-PS4-2,3,4 K-2-ETS1-1,2,3	Engineering is Elementary® To Get to the Other Side: Designing Bridges	K-PS2-1,2 K-2-ETS1-1,2,3
	YES Enrichment™ Engineering Bandages	2-PS1-2 K-2-ETS1-1,2,3		
Computer Science	Computer Science Essentials® Programming Robots	Computing Systems, Data & Analysis, Algorithms & Programming, Impacts of Computing*		







2 <sup>nd</sup> Grade	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Pumpkin Pollinator	2-PS1-2 2-LS2-2 K-2-ETS1-1,2,3	Engineering is Elementary® A Work In Progress: Improving A Play Dough Process	2-PS1-2 K-2-ETS1-1,2,3
	YES Enrichment™ Engineering Sails	K-PS2-2 2-PS1-2 K-2-ETS1-1,2,3		
Computer Science	Computer Science Essentials® Creating Animations	Computing Systems, Data & Analysis, Algorithms & Programming, Impacts of Computing*		

3 <sup>rd</sup> Grade	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Magnetic Dog Doors	3-PS2-1,3,4 3-5-ETS1-2	Engineering is Elementary® Catching the Wind: Designing Windmills	3-PS2-1,2 3-ESS2-1 3-5-ETS1-1,2,3
	YES Enrichment™ Engineering Rescue Shuttles	3-PS2-2 3-5-ETS1-1,2,3		
Computer Science	Computer Science Essentials® Building Automated Systems	Computing Systems, Data & Analysis, Algorithms & Programming, Impacts of Computing*		

4 <sup>th</sup> Grade	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Safety Vests	4-PS3-4 4-PS4-3 3-5-ETS1-1, 2	Engineering is Elementary® Now You're Cooking: Designing Solar Ovens	4-PS3-4 4-ESS3-1 3-5-ETS1-1
	YES Enrichment™ Engineering Upcycled Toys	3-PS2-2 5-ESS3-1 3-5-ETS1-1,2,3		
Computer Science	Computer Science Essentials® Designing Computer Games	Computing Systems, Data & Analysis, Algorithms & Programming, Impacts of Computing*		

5 <sup>th</sup> Grade	Curriculum Series		Curriculum Series	
	Suggested Units	Standards	Suggested Units	Standards
Engineering	YES Elementary™ Engineering Plastic Filters	5-LS2-1 5-ESS1-1 5-ESS3-1 3-5-ETS1-1,2,3	Engineering is Elementary® A Long Way Down: Designing Parachutes	5-PS2-1 3-5-ETS1-1,2,3
	YES Enrichment™ Engineering Sock Assistive Devices	3-5-ETS1-1,2,3		
Computer Science	Computer Science Essentials® Analyzing Digital Images	Computing Systems, Data & Analysis, Algorithms & Programming, Impacts of Computing*		

**Grades  
6–8**

<i>Curriculum Series</i>		<i>Curriculum Series</i>	
<b>Suggested Units</b>	<b>Standards</b>	<b>Computer Science Module</b>	<b>Standards</b>
<i>YES Middle School™</i> Engineering Medicine Coolers	<b>MS-PS1-6</b> <b>MS-PS3-3</b> <b>MS-ETS1-1,2</b>	<i>YES Middle School™</i> Heatwave Visualizations 	<b>Algorithms &amp; Programming, Impacts of Computing*</b>
		<i>YES Middle School™</i> Medicine Cooler Alarms 	<b>Data &amp; Analysis, Impacts of Computing*</b>
<i>YES Middle School™</i> Engineering Eco-friendly Slippers	<b>MS-PS3-1</b> <b>MS-PS2-2</b> <b>MS-ETS1-1,2</b>	<i>YES Middle School™</i> Step Counters 	<b>Algorithms &amp; Programming, Impacts of Computing*</b>
		<i>YES Middle School™</i> User Reviews Analysis 	<b>Data &amp; Analysis, Impacts of Computing*</b>
<i>YES Middle School™</i> Engineering Landing Pads	<b>MS-PS2-1</b> <b>MS-PS3-2</b> <b>MS-PS3-5</b> <b>MS-ETS1-1,2,3,4</b>	<i>YES Middle School™</i> Delivery Notification Systems 	<b>Algorithms &amp; Programming*</b>
		<i>YES Middle School™</i> Bounce Height Measurements 	
<i>Engineering Everywhere®</i> Put a Lid on It: Engineering Safety Helmets	<b>MS-PS2-1</b> <b>MS-LS1-8</b> <b>MS-ETS1-1,2,3,4</b>		
<i>Engineering Everywhere®</i> Go Fish: Engineering Prosthetic Tails	<b>MS-LS1-4</b> <b>MS-ETS1-1,2,3,4</b>		